भारतीय मानक Indian Standard

IS 10068 (Part 2): 2018

दबा कर कार्य करने वाले डाई सेट (प्लेन टाइप)—विशिष्टि

भाग 2 सैंटर पोस्ट वर्ग डाई सेट (पहला पुनरीक्षण)

Press Working Die Sets (Plain Type) — Specification

Part 2 Centre Post Square Die Sets

(First Revision)

ICS 25.120.10

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भारतीय मानक ब्यूरो BUREAU OF INDIAN STANDARDS

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FOREWORD

This Indian Standard (Part 2) (First Revision) was adopted by the Bureau of Indian Standards after the draft finalized by the Metal Forming Machines Sectional Committee had been approved by the Production and General Engineering Division Council.

This standard was first published in 1982. The experience gained in implementation of this standard has necessitated this revision. This standard is issued in six parts. Other parts of this Indian Standard are:

- Part 1 Centre post rectangular die sets
- Part 3 Centre post round die sets
- Part 4 Rear post rectangular die sets
- Part 5 Rear post square die sets
- Part 6 Rear post round die sets

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2: 1960 'Rules for rounding off numerical values (*revised*)'.

Indian Standard

PRESS WORKING DIE SETS (PLAIN TYPE) — **SPECIFICATION**

PART 2 CENTRE POST SQUARE DIE SETS

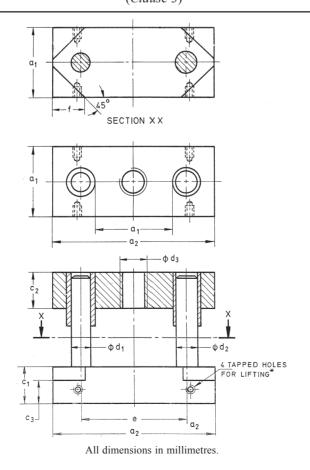
(First Revision)

1 SCOPE	IS No.	Title	
This standard covers dimensions and other	210 : 2009	Grey iron castings —Specification (<i>fifth revision</i>)	
requirements for plain type square die set with two guide posts in central axis.	1030 : 1998	Carbon steel castings for general engineering purposes—Specification	
2 REFERENCES		(fifth revision)	
The following standards contain provisions which, through reference in this text, constitute provisions of	2062 : 2011	Hot rolled medium and high tensile structural steel — Specification	
this standard. At the time of publication, the editions indicated were valid. All standards are subject to	8127 : 2005	(seventh revision) Guide bushes for press tool die sets — Specification (second revision)	
revision, and parties to agreements based on this	11742 : 1986	Test chart for die sets	
standard are encouraged to investigate the possibility of applying the most recent editions of the standards	3 DIMENSIONS		

The dimensions shall be as given in Table 1.

Table 1 Dimensions for Press Working Die Sets (Centre Post Square Die Sets) (Clause 3)

indicated below.



Die Space $a_1 \times a_1$	a_2	c_1	c_2	c_3	d_1	d_2	d_3	е	f
50 ×50	146	40	20	20	15	16	M 16 × 1.5	86	20
63 ×63	160	40	25	20	15	16	$M 16 \times 1.5$	99	30
80 ×80	197	50	30	30	19	20	$M 20 \times 1.5$	127	15
100×100	228	50	32	30	24	25	$M 20 \times 1.5$	152	40
125×125	253	50	32	30	24	25	$M 20 \times 1.5$	177	40
160×160	306	56	40	30	30	32	$M 24 \times 1.5$	220	50
200×200	346	56	40	30	30	32	$M 24 \times 1.5$	260	50
250×250	420	56	50	30	38	40	$M 30 \times 2$	320	50
315×315	485	63	50	30	38	40	$M 30 \times 2$	385	50
400×400	570	63	60	30	38	40	$M 42 \times 3$	470	50
500 × 500	694	75	60	30	48	50	$M 42 \times 3$	580	50

^{*} NOTE — Tapped Size: M 10×25 for die sets up to 250×250 die space, and M 16×40 for die sets of 313×315 die space and above.

4 DESIGNATION

4.1 A centre post square die set of cast iron having a die space $a_1 \times a_1 = 80 \text{ mm} \times 80 \text{ mm}$ with guide posts 'Type A' with round ends and having length = 160 mm, and with stepped solid (Type A) guide bushes of length l = 50 mm, shall be designated as:

Die Set C — 80 IS 10068 (Part 2) along with guide posts AR— $19/20 \times 160$ IS 7664 and guide bushes A— $19/20 \times 50$ IS 8127

4.2 A centre post square die set of mild steel having a die space $a_1 \times a_1 = 80 \text{ mm} \times 80 \text{ mm}$ with guide posts 'Type B' with tapered ends and having length = 160 mm, and with guide bushes 'Type B' of length l = 50 mm, shall be designated as:

Die Set MS — 80 IS 10068 (Part 2) along with guide posts BT — $19/20 \times 160$ IS 7664 and guide bushes B — $19/20 \times 50$ IS 8127

4.3 A centre post square die set of welded or cast steel having a die space $a_1 \times a_1 = 80 \text{ mm} \times 80 \text{ mm}$, with guide posts 'Type B' with tapered ends and having length = 160 mm, and with guide bushes 'Type B' of length l = 50 mm, shall be designated as:

Die Set S — 80×80 IS 10068 (Part 2) along with guide posts BT — $19/20 \times 160$ IS 7664 and guide bushes B — $19/20 \times 50$ IS 8127

5 MATERIAL

The top and bottom tool holders shall be made of hot rolled medium and high tensile structural steel of IS 2062 or of cast iron of grade FG 260 of IS 210 or cast steel of grade 230-450W of IS 1030.

6 GENERAL REQUIREMENTS

The top and bottom tool holders shall be free from cracks, burrs and pits and shall satisfy for accuracy when tested in accordance with IS 11742.

7 MARKING

7.1 The designation and the manufacturer's identification or trademark shall appear at a prominent place on tool holders.

7.2 BIS Certification Marking

- **7.2.1** The press working die sets may also be marked with the Standard Mark.
- **7.2.2** The use of the Standard Mark is governed by the provisions of the *Bureau of Indian Standards Act*, 1986 and the Rules and Regulations made thereunder. The details of conditions under which the licence for the use of the Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

Bureau of Indian Standards

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This Indian Standard has been developed from Doc No.: PGD 04 (1551).

Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

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